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MEDICAL SCHOOL
DEPARTMENT OF PHYSIOLOGY • MINNEAPOLIS, MINNESOTA 55455

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Dr. Joshua Lederberg
Department of Medical Genetics
Stanford University
Stanford, California

Dear Doctor Lederberg:

I have just had an opportunity to read your thoughtful column on animals for research published in the Washington Post on August 21. In general, I think it is very constructive, ~~and that~~ particularly in the Washington Post because some of the editorial writers have been extremely critical. The effect ought to be good. However, I would question your proposal Number Three very seriously because I think that there are considerations which you may not have borne in mind which make the solution you suggest in that recommendation not necessarily the best one from the point of view of over-all human interest.

First, let me say that, aside from economic considerations, I would certainly prefer to use especially raised and uniformly healthy dogs for my experiments than to use mongrel strays of uncertain health history. I should point out, however, that there are many types of experiments in which unknown genetic ancestry is, so far as we can tell, of no consequence.

My main point, however, is that the public ought to decide whether it wants to spend the money not only for capital outlay, but for actual production of the two million or so dogs that are used annually in tests and experiments where there seems to be no advantage in employing known genetic strains. I have not calculated the sums involved in capital outlay, but it is easy to calculate what the operating costs would be from existing information. The average cost of a dog obtained as we do obtain them today from dealers who buy from farmers and from dog pounds is something under ten dollars making the total outlay $20,000,000 annually. The best information we have as to the cost of dogs raised for the purpose of use in research is that they would cost roughly $100 apiece at maturity, which is a factor of 10 and means that an additional $180,000,000 per year would have to go into this enterprise unless great economies could be achieved on a large scale feeding and breeding operation. I can hardly conceive of this reducing the cost to less than half, which would still leave a sizable cost.

My own real question is whether the public interest would be best served by spending $90,000,000 or $180,000,000 per year on this or on some

of our pressing social problems such as the situations in Watts and Harlem, or the general world situation with respect to the population problem.

Of course, one of the possibilities is that your prediction that the number of animals needed would be reduced if we were working with genetically pure lines. In the sort of workthat I do with isolated hearts, for example, on dogs where we employ at least three animals for one experiment because we need blood and a donor dog to carry it out, we have found no evidence of incompatibility due to blood types which interfere with our experiments and I gravely doubt that the basic behavior of the myocardium is different in one strain from another. Consequently, I doubt that we could gain anything by genetic purity, although I am sure that we gain by using healthy animals, and, as a matter of fact, we routinely use only animals that have gone through three weeks of immunizations, improved feeding, and so forth. For my studies, to raise the cost of dogs to $300 would more than double the cost of the whole research enterprise. I suspect that I would choose another research project if such costs were involved. I do not believe that it would be in the public interest to make, unnecessarily, the cost of animal material a major criterion in a scientist's decision to follow one or another line of investigation.

I am writing you at some length to explain my viewpoint because I would very much like to hear from you as to the basis of your prediction that much smaller numbers of dogs would be needed if they were all from genetically pure strains. This is undoubtedly going to be a problem for consideration by the Congress in the future. It may even begin next year, and I, for one, do not want to take an unreasonable position, nor especially to advocate that the NSMR take an unreasonable position. I may tell you that I am very much afraid of Federal administrative intervention in the actual conduct of research. Mrs. Christine Stevens, of whom you undoubtedly know, is among those who are very anxious to see such legislation passed. She has proposed Federal rules and regulations, one of which would be that unclaimed, impounded animals might appropriately be used for acute experiments in which recovery following an anesthetic is not anticipated, and that especially bred animals should be used for all chronic experiments. I have been inclined to oppose this latter position as well as all of her proposals to institute a kind of replica of the British system of licenses and Home Office regulation of scientific use, and I would be interested in knowing your reactions to her entire position.

I am enclosing a copy of a short statement that I made about the whole problem a few months ago, and I call your attention especially to the second paragraph because I am in hearty agreement with this, but, as you

will see, if you read the article, I would gravely fear for the future of progress in such fields as experimental surgery and neurophysiology and psychology, if regulation of use were to be instituted. I hope you will find time to give me some of your further thoughts.

Sincerely yours,

Maurice B. Visscher

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enclosure